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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,022	08/07/2001	Bruce E. McNair	ATT-020PUS	3026
26652	7590	01/14/2005	EXAMINER	
AT&T CORP. P.O. BOX 4110 MIDDLETOWN, NJ 07748			BEAMER, TEMICA M	
			ART UNIT	PAPER NUMBER

2681

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,022

Applicant(s)

MCNAIR, BRUCE E.

Examiner

Temica M. Beamer

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7, 12, 13, 18, 21, 24 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Rantalainen et al (Rantalainen), U.S. Patent Pub. No. 2002/0107028.

Regarding claims 1, 18, 21, 24 and 27, Rantalainen discloses a method for determining the location of a mobile station, comprising. receiving a plurality of simulcast signals from respective base stations, determining relative time of arrival information for the received plurality of simulcast , and determining the position of the mobile station (0002).

Regarding claim 2, Rantalainen discloses the method according to claim 1, further including determining the relative time of arrival information using characteristics inherent in the received signal (0002).

Regarding claim 3, Rantalainen discloses the method according to claim 2, wherein the inherent characteristics of the received signal include time dispersion due to simultaneous transmission of the substantially identical simulcast signals (0002).

Regarding claim 7, Rantalainen discloses the method according to claim 1, further including receiving base station ID information in the respective simulcast signals (0014).

Regarding claim 12, Rantalainen discloses the method according to claim 1, further including computing the relative time of arrival information using differential in frequency information (0002).

Regarding claim 13, Rantalainen discloses the method according to claim 1, further including receiving a signal from a first one of the plurality of base stations to a second one of the plurality of base stations for identifying the simulcast signals from respective first and/or second ones of the plurality of base stations (0002).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2681

5. Claims 4-6, 19, 20, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rantalainen and Baum et al (Baum), U.S. Patent No. 5,867,478.

Regarding claims 4,19,22 and 25 Rantalainen discloses the limitations in claims 3, 18, 21 and 24 as described above. Rantalainen, however, fails to what Baum discloses wherein the received simulcast signals having an OFDM modulation format (col. 7,lines 40-60).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Rantalainen to include OFDM transmission for the purpose of reducing the impact of interference in OFDM environment.

Regarding claim 5, Rantalainen further discloses the method according to claim 4, further including estimating channel frequency response (0002).

Regarding claim 6, Rantalainen discloses the method according to claim 5, further including transforming the channel frequency response to obtain the relative time of arrival information (0002).

Regarding claim 20, Rantalainen further discloses the method according to claim 19, further including transmitting location specific information to the mobile station (0002).

6. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rantalainen.

Art Unit: 2681

Regarding claim 8, Rantalainen discloses the limitations of claim 1 as described, but fails to disclose the various techniques of locating a mobile station such as using GPS, Doppler Shift, locus points, etc.

The examiner contends, however, that such techniques are very well known in the art and the examiner takes official notice as such. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Rantalainen with such location determining mechanisms to perhaps improve the accuracy of locating a mobile station in an emergency situation.

7. Claims 14-16, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rantalainen in view of Budnik et al (Budnik), U.S. Patent No. 6,052,064.

Regarding claims 14 and 16, Rantalainen discloses the method according to claim 1 as described above. Rantalainen fails to disclose what Budnik discloses which is the method according to claim 1, further including transmitting the mobile station position from the mobile station to one or more of the plurality of base stations (col. 5, lines 15-19).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Rantalainen to include a triangulation method for the purpose of locating the mobile.

Regarding claim 15, Budnik further discloses the method according to claim 14, further including transmitting the mobile station position from the one or more plurality of

base stations to a network server associated with the one or more plurality of base stations (col. 6, lines 13-32).

Regarding claim 23, Rantalainen disclose the limitations of claim 21, but fails to explicitly disclose what Budnik discloses which is the mobile station according to claim 21, further including a transmitter for transmitting the mobile station location to one or more of the plurality of base stations (col. 5, lines 15-19).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Baum to include a triangulation method for the purpose of locating the mobile.

Regarding claim 26, Rantalainen disclose the limitations of claim 21, respectively, but fails to explicitly disclose what Budnik discloses which is the network according to claim 24, further including at least one network server for providing location-specific information (i.e., location estimate) to the mobile station based upon mobile station location information provided to one or more of the plurality of base stations (col. 5, lines 15-19).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rantalainen, Budnik and Oren et al (Oren), U.S. Patent No. 6,725,045.

Regarding claim 17, Rantalainen as modified by Budnik disclose the limitations of claim 15 but fail to disclose what Oren teaches wherein the method according to claim 15, further including broadcasting location-specific advertisements (col. 4, lines 8-13).

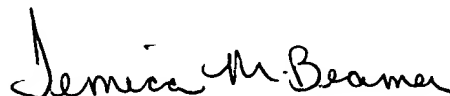
At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Baum as modified by Budnik to include location base advertising for the purpose of notifying mobile units.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Temica M. Beamer  
Primary Examiner  
Art Unit 2681

January 10, 2005